

Appendix A: Hunter Survey

INTRODUCTION

Historically, Metropolitan District Commission – Division of Watershed Management (DWM) lands within the Wachusett watershed were off-limits to hunting. In 1996, the DWM initiated a pilot program that allowed restricted hunting by permit only during a 2-year trial period. In 1998, following the initial 2-year trial, the DWM formalized its hunting program. Currently, hunting is allowed on portions of DWM lands (see **Figure 9** in main body of text). Hunters are required to obtain a free hunting permit and are required to adhere to all DWM rules and regulations as well as state wildlife laws. The hunting permits were initially valid for 2 years, but were recently extended to 5 years.

The DWM's Wachusett watershed public access plan was reviewed and updated in the fall of 2002. As part of that revision, the DWM hunting program was reviewed. In order to gain a more clear understanding of how the public was utilizing DWM lands for hunting, a survey was written and mailed during the fall of 2002 to permitted hunters. A copy of the survey is attached (Hunter Survey Appendix 1).

SURVEY RESULTS

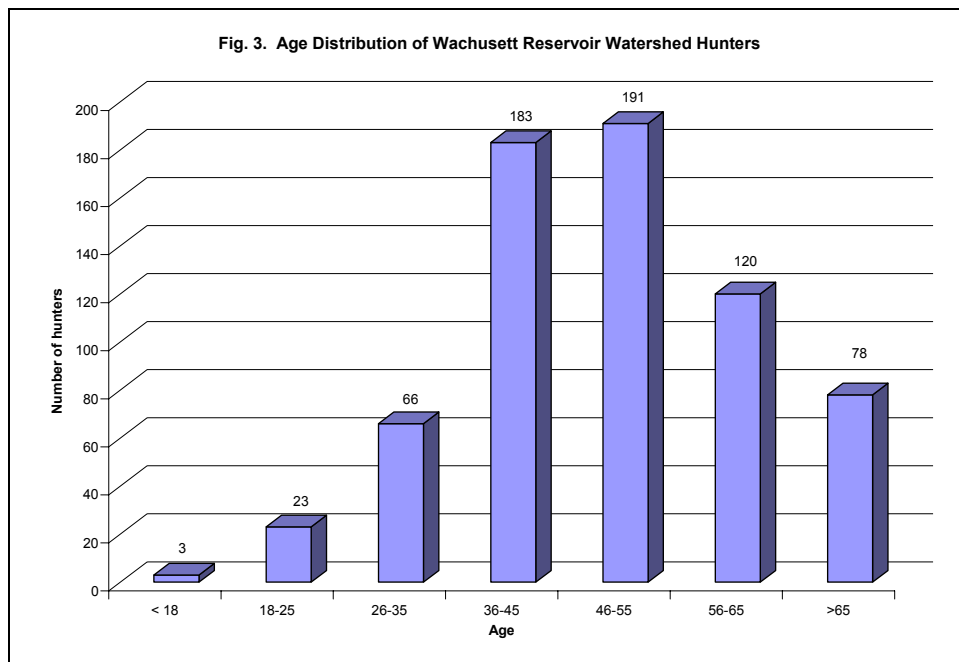
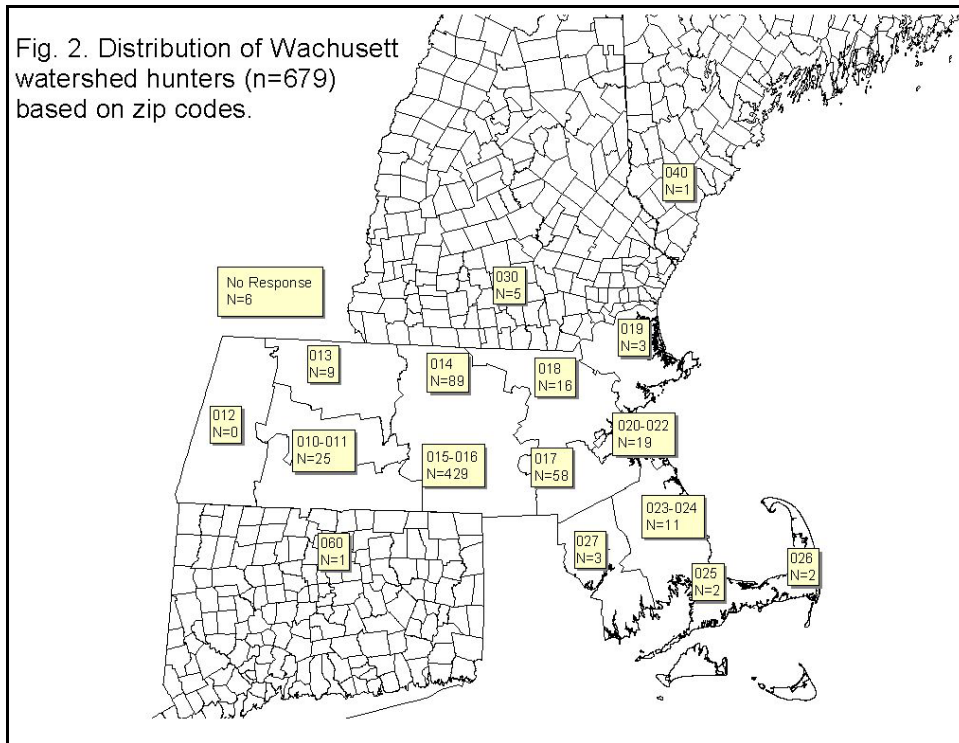
A total of 1,144 surveys were mailed to hunters who had received a DWM hunting permit during 2000 and 2001. In the initial mailing, a survey, cover letter, and stamped self-addressed envelope were included. Approximately 4 weeks after the initial mailing, a follow-up mailing was sent to unresponsive hunters encouraging them to respond. The second mailing included another cover letter, survey, and unstamped addressed envelope.

A total of 795 responses were received for a response rate of 69%. Of the 795 responses, 679 indicated they had hunted DWM lands sometime during the last 12 months. The remaining 116 respondents indicated they had not hunted on DWM property.

Hunter Profile

Most hunters (N=429) lived within the Wachusett watershed or in the surrounding area (Fig. 2). However, hunters did travel from all over the state except the Berkshires. In addition, there were hunters from Maine (N=1), New Hampshire (N=5), and Connecticut (N=1).

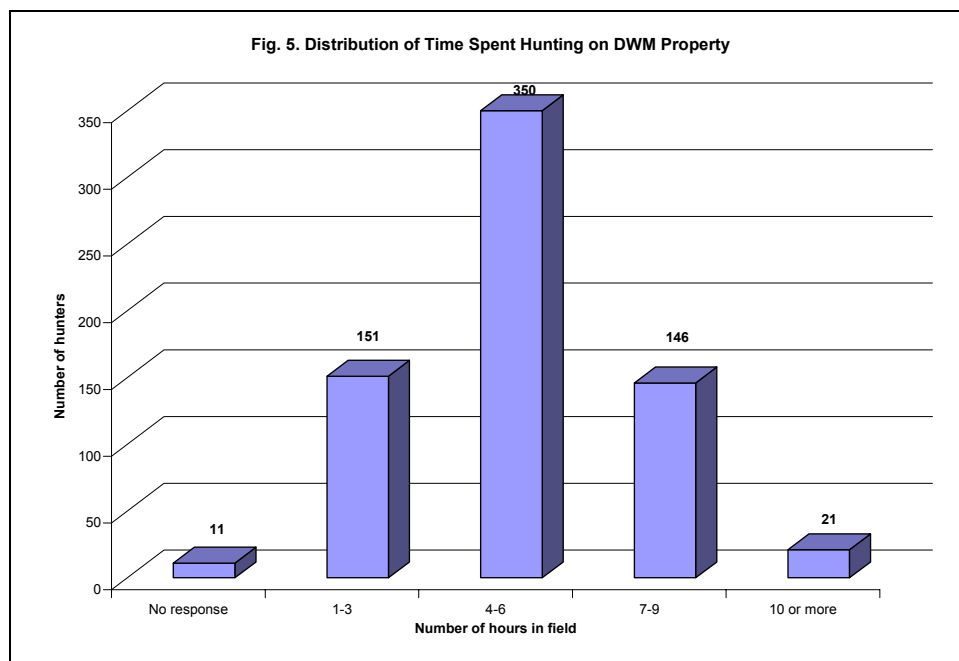
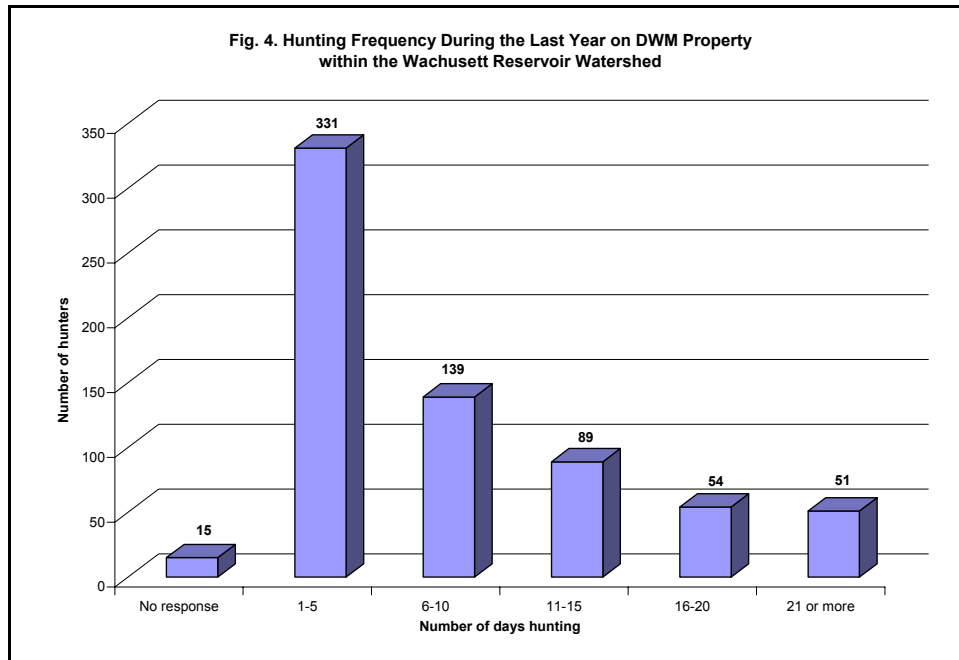
An overwhelming majority of hunters were male (N=630, 93%). Nineteen (3%) hunters were female and 30 (4%) hunters did not respond to the question. When examining the age structure of the hunters, the results show that a majority of the hunters were 35 years of older (Fig. 3). Only 23 hunters were younger than 25, and only 3 were younger than 18.



Hunting Characteristics

Most hunters indicated that they hunted on DWM property for only 1-5 days within the past 12 months (Fig. 4). However, there were a few hunters (N=51) who hunted on DWM property for 21 or more days. When hunting on DWM property, most hunters spent 4-6 hours in the field

(Fig. 5). About equal number of hunters spent either 1-3 or 7-9 hours in the field. Very few hunters spent more than 10 hours hunting.



Deer, turkey, and upland birds were the most popular species pursued by permitted hunters (Table 1). Seventy-two deer, 40 turkey, and 764 upland birds were harvested on DWM property during the last 12 months. All legal games species were pursued by at least 1 hunter on DWM property, however no one harvested any bobcat or bear.

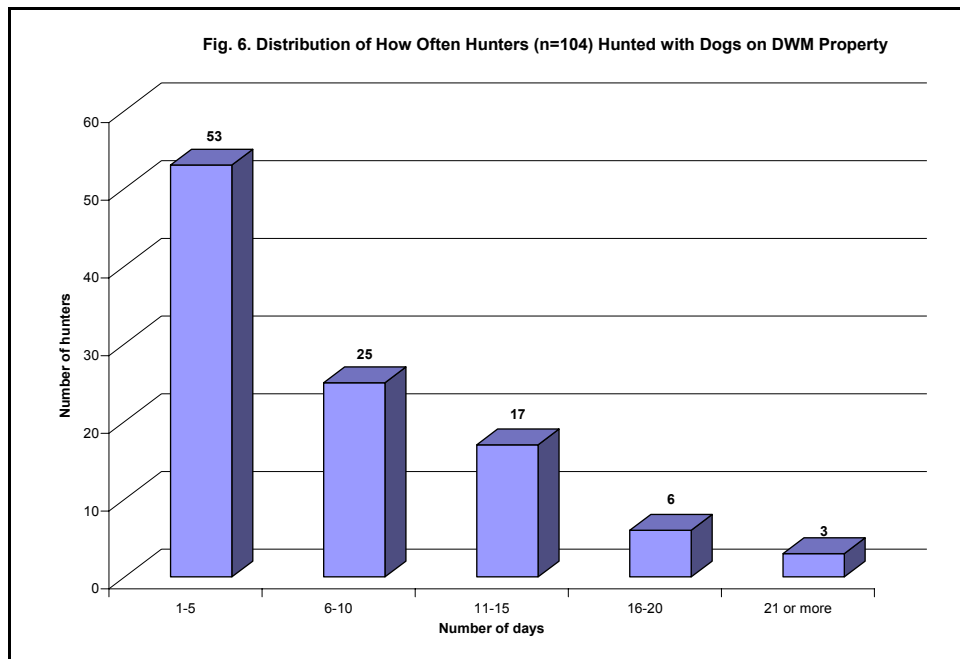
Table 1.
Summary of Hunters' Responses to Species of Animal Pursued
and Number Killed While Hunting on DWM Property

Species	# Hunters Pursuing	# Animals Killed
White-tailed deer	597	72
Upland birds ¹	241	764
Turkey	223	40
Coyote	71	38
Rabbit	64	193
Squirrel	47	171
Snowshoe hare	38	36
Waterfowl	31	57
Fox (red or gray)	12	5
Black bear	11	0
Crow	6	118
Raccoon	4	13
Bobcat	3	0

¹Upland birds includes pheasants, grouse, and quail

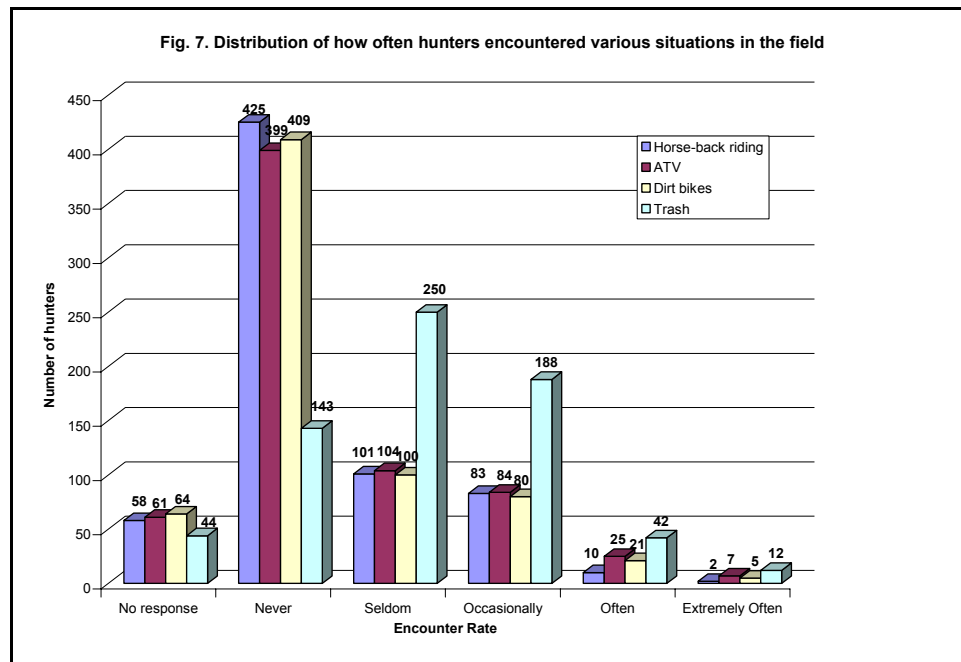
Of the 597 hunters pursuing white-tailed deer on DWM property, 471 used shotguns. A total of 296 hunters indicated they used archery equipment to hunt deer, while 212 hunters used muzzleloaders.

A total of 104 hunters indicated that they hunted with a dog on DWM property during the last 12 months. Of the 104 hunters, most (N=53) only hunted 1-5 days during the last year (Fig. 6).



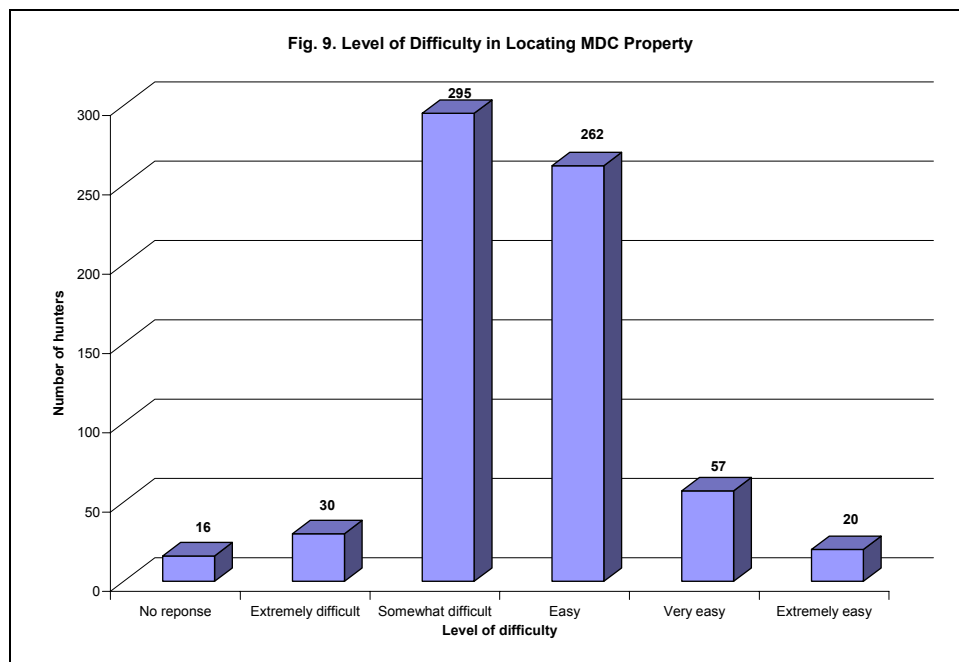
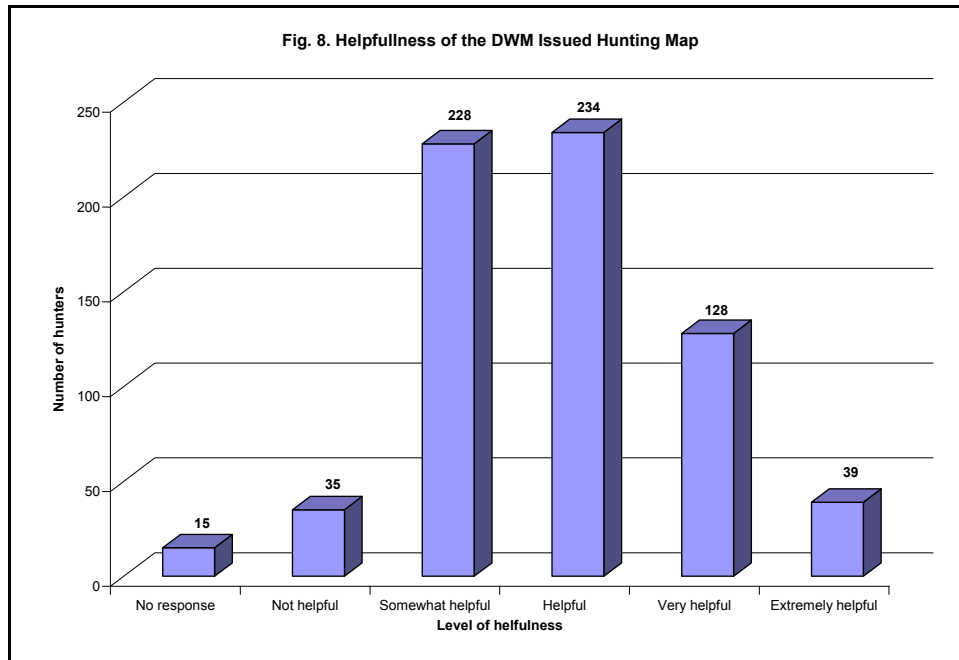
Hunters and MDC Regulations

Because hunters may spend long hours in the field over a period of time, the DWM was curious how often hunters encountered prohibited activities and other situations. Hunters were asked how often they encountered horse-back riding, ATV's, dirt bikes, and trash in the field. A majority of the hunters responded that they never encountered horse-back riding, ATV's, or dirt bikes (Fig. 7). However, trash was encountered by hunters at a much higher rate. Very few hunters indicated that they encountered these circumstances extremely often.



Each hunter receiving a hunting permit is issued a map that depicts lands where hunting is permitted and not permitted. Hunters were asked to rank the helpfulness of these maps. A majority of the hunters thought the map was helpful or somewhat helpful (Fig. 8). Very few hunters found the map extremely helpful or not at all helpful.

DWM land is sometimes difficult to locate in the field because of inadequate signage or obscure access points. When asked how difficult it was in actually locating DWM property, a majority of the hunters found it to be easy or only somewhat difficult (Fig. 9). Very few hunters thought it was extremely difficult or extremely easy.



Hunters were given the opportunity to write in comments at the end of the survey. A majority of hunters took the time to write something in the space provided. Comments were varied and diverse. However, there were some comments repeated by many hunters and these included:

- Issue a more detailed map using topography as a base (written by ~75% of the hunters)
- Open more areas to archery and hunting
- Expressing general happiness to be able to hunt DWM lands
- Improve boundary markings

- Improve signage
- Increase parking areas
- Purchase more land

A complete list of the comments is provided in Hunter Survey Appendix 2.

Management Recommendations

DWM lands are used by a large number of hunters on a regular basis. Within the hunting community, the data suggests that local hunters utilize DWM lands the most. Based on written comments, DWM land is highly valued. Hunters pursue a range of species on DWM lands, although certain species are more popular. Although a number of hunters utilize DWM lands, it appears that the average hunter spends relatively little time on DWM property during the course of a year. Further, relatively few hunters hunt with a dog on DWM property.

The results pertaining to the encounter rate of various restricted activities are encouraging. It appears that hunters rarely or never encounter horses, ATV's or dirt bikes. Unfortunately, the encounter rate for trash is higher. Although the survey results indicated that hunters felt the hunting map was at least somewhat helpful, written comments are contradictory. While the map may provide a very general overview of where hunting is allowed, it probably doesn't provide the level of detail needed by hunters to easily identify DWM parcels and access points. Locating DWM property in the field proved more difficult. While a large number of hunters indicated it was easy, a larger number of hunters found it somewhat difficult.

In order to address hunter concerns and improve the hunting program's effectiveness, several actions are recommended:

1. Revise the current hunting map. The new map should use the USGS topography as a base, should be larger to improve the scale (make the map double-sided to increase its size), should be issued to future permit applicants, and should be made available to current permit holders.
2. Examine the feasibility of initiating long-term monitoring of both deer herd dynamics in the no-hunting zone and tree regeneration across the watershed. Consider expanding its hunting zone, if deemed necessary, to include more lands east of Interstate I-190. The Division recognizes the potential for some of its no-hunting lands to experience overabundant deer populations. Although primarily focused on the impacts of overabundant deer on tree regeneration, the Division also recognizes that other social issues related to overabundant deer may become more prevalent, such as increased deer/vehicle collisions and personal property damage.
3. Improve signage where possible. Some signs in areas where hunting is allowed say hunting is prohibited or are temporarily marked with hunting allowed. This can cause confusion among hunters, non-hunters, and enforcement personnel.

8. If you have hunted white-tailed deer in the past 12 months on MDC property in the Wachusett watershed, which method did you use to hunt? (please check all that apply)

- | | |
|----------------------------------|--|
| <input type="checkbox"/> Archery | <input type="checkbox"/> Muzzleloader |
| <input type="checkbox"/> Shotgun | <input type="checkbox"/> Did not hunt deer |

9. In the past 12 months have you hunted with a hunting dog on MDC property in the Wachusett watershed?

- ☐ Yes [If Yes, please answer Question #9. If No,
☐ No please skip to Question #10.]

10. In the past 12 months, how frequently have you hunted with a hunting dog on MDC property?

- ☐ 1-5 days
☐ 6-10 days
☐ 11-15 days
☐ 16-20 days
☐ 21 or more days

Part 3: Questions Related to the MDC

11. While hunting on MDC property, how often do you encounter the following activities/situations?

- | | | | | | |
|-----------------------|--------------------------------|---------------------------------|---------------------------------------|--------------------------------|--|
| a. Horse-back riding: | <input type="checkbox"/> Never | <input type="checkbox"/> Seldom | <input type="checkbox"/> Occasionally | <input type="checkbox"/> Often | <input type="checkbox"/> Extremely Often |
| b. ATV's: | <input type="checkbox"/> Never | <input type="checkbox"/> Seldom | <input type="checkbox"/> Occasionally | <input type="checkbox"/> Often | <input type="checkbox"/> Extremely Often |
| c. Dirt Bikes: | <input type="checkbox"/> Never | <input type="checkbox"/> Seldom | <input type="checkbox"/> Occasionally | <input type="checkbox"/> Often | <input type="checkbox"/> Extremely Often |
| d. Garbage/Trash: | <input type="checkbox"/> Never | <input type="checkbox"/> Seldom | <input type="checkbox"/> Occasionally | <input type="checkbox"/> Often | <input type="checkbox"/> Extremely Often |

12. How helpful is the MDC hunting map that's issued with your permit in locating MDC parcels?

- ☐ Not helpful at all
☐ Somewhat helpful
☐ Helpful
☐ Very helpful
☐ Extremely helpful

13. How difficult is it actually locating MDC property in the field when you are trying to hunt?

- ☐ Extremely difficult
☐ Somewhat difficult
☐ Easy
☐ Very easy
☐ Extremely easy

14. Are there any specific comments or suggestions you have regarding hunting on MDC property in the Wachusett watershed?

THANK-YOU FOR YOUR PARTICIPATION

Hunter Survey Appendix 2: Written Comments from the Wachusett Hunter Survey, 2002

1. Make maps clearer showing more detail with GPS points (of boundaries), cart roads, stonewalls, boundaries, legal parking areas, access points, all overlaid onto a topographic map.
2. Open more areas to archery and hunting, especially closer to the reservoir to enable hunters to get more waterfowl.
3. Many hunters are very happy with MDC policies, land acquisition.
4. Increase available parking areas.
5. Purchase more land.
6. Increase handicap access to hunting areas.
7. MDC boundaries should be more clearly marked.
8. Improve signage to state the following:
 - a. Hunting allowed or disallowed (permanently marked- no tape which can be removed by those opposed to hunting)
 - b. All hikers must wear hunter orange during the hunting season
 - c. Dogs must be leashed
 - d. Color code "hunting allowed" on signs
 - e. On Rail Trail, put up signs saying hunter alert
 - f. Post rules, regulations, and hunting dates to reduce conflicts
9. Educate public on hunting and its benefits. Many hunters are being harassed by people opposed to hunting. Some have actually been escorted off of MDC property by the local (especially Princeton) and state police who are unsure of MDC rules on hunting.
10. Improve enforcement of NO ATV's, dirt bikes, and unleashed dogs.
11. Make more rubbish barrels available along trails and then try to enforce correct disposal of waste. Fine people who litter.
12. Many hunters bring bags to collect rubbish and believe that others should do likewise.
13. Clean up Kristoff property and other properties where trash has accumulated.
14. Control exotics, maintain "edge" cover and increase mixed/transitional cover; keep fields open for songbirds, begin plantings (food plots for deer) for particular species, try to manage habitat to increase biodiversity.
15. Charge hunting fees and utilize dollars to purchase more land.
16. Make hunting permit smaller (wallet size).
17. Use sign posts and not trees.
18. Open land for trapping.
19. Allow horses and snowmobiles.
20. Allow ATV's for dragging out deer, especially for those with health issues such as heart disease.
21. Allow ATV's for general use but charge a \$10 fee.
22. Open areas 1 hour before daylight.
23. Extend coyote season because there are too many of them.
24. Sell topo maps.
25. Allow dogs.
26. Fix signs that are down.
27. Allow hunting and archery on Sunday.
28. Remove all old signs saying "no hunting" in areas open to hunting.

29. Make hunting permits:
 - a. Issued for a lifetime
 - b. Easier to obtain
 - c. Renewal applications sent out when necessary
 - d. Not necessary – use MA license only
30. Allow rifles for deer hunting.
31. Stock pheasants and more deer.
32. Notify hunters of newly acquired parcels.
33. Give hunters gate keys especially for old town roads.
34. Areas are too fragmented.
35. No police power for rangers.
36. Why are fishermen allowed complete shoreline access and not hunters.
37. Do a deer survey and make public the number and location of deer.
38. Get together with wildlife people (hunter did not give a reason).
39. Use a lottery similar to the Quabbin hunt to determine how many hunters allowed to utilize MDC property.
40. Trim back fire roads that are growing in.
41. Open Kristoff's to vehicles.
42. Increase number of port-a-potties.
43. Abutters should have access to MDC property, and if you do hold a permit, you should be allowed to bring 2 non-permit holders as guests.
44. Many moose.
45. MDC makes good neighbors.
46. No deer.
47. Steve Drawbridge forever missed.
48. Some hunters worried that this survey will be used as a tool to eliminate hunting at MDC.

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